

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name Tributyl Phosphate

CAS number 126-73-8

Synonyms TBP

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
12501 Pauls Valley Road
Austin, Texas 78737
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC


SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute oral toxicity Category 4
Skin Corrosion/irritation Category 2
Serious Eye Damage/Eye Irritation Category 2
Carcinogenicity Category 2

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Warning
Hazard statements	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer.
Precautionary statements	Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Response IF exposed or concerned: Get medical attention/advice. Skin IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Eyes IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Ingestion Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Storage Store locked up. Disposal Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Toxic to aquatic life. May cause respiratory irritation. May cause drowsiness or dizziness.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Tributyl phosphate	TBP	126-73-8	<=100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	Show this sheet to a doctor if medical advice is needed.
If inhaled	Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

Unsuitable extinguishing media None identified.

5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition. Carbon monoxide (CO)
Carbon dioxide (CO₂) Oxides of phosphorus Phosphorus trihydride (phosphine)

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point 146 - 165 °C / 294.8 - 329 °F

Autoignition Temperature 400 °C / 752 °F

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact Not impact sensitive.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
3	1	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not touch or walk through spilled material. Do not touch damaged packages or spilled material.

6.2 Environmental precautions

See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not let this chemical enter the environment.

6.4 Reference to other sections

Refer to protective measures listed in Sections 7 and 8. See section 13 for proper disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. Avoid ingestion and inhalation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep in properly labeled containers. Keep away from direct sunlight. Keep away from oxidizing agents.

Incompatibilities

Strong oxidizing agents, Strong bases.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Tributyl phosphate	TWA	0.2 ppm

US. ACGIH Threshold Limit Values

Component	Type	Value
Tributyl phosphate	TWA	5 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Tributyl phosphate	TWA	0.2 ppm

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-79 °C / -110.2 °F
Boiling Point/Range	289 °C / 552.2 °F
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No information available
Lower	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Density	0.979
Solubility	0.6 g/100ml
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	400 °C / 752 °F
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	C12 H27 O4 P
Molecular Weight	266.32
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Temperatures above 146°C. Incompatible products. Protect from water.

10.5 Incompatible materials

Strong oxidizing agents, Strong bases.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Oxides of phosphorus, Phosphorus trihydride (phosphine).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tributyl phosphate	1390 mg/kg (Rat)	LD50 > 3100 mg/kg (Rabbit)	28 g/m ³ (Rat) 1 h 1.359 mg/L (Rat) 4 h

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Tributyl phosphate	126-73-	Not listed	Not listed	A3	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May cause respiratory irritation. Maybe harmful if swallowed.

SECTION 12: Ecological information

12.1 Toxicity

Do not empty into drains. Do not flush into surface water or sanitary sewer system.

Component	Freshwater Algae	Freshwater Fish	Water Flea
Tributyl phosphate	EC50: = 1.1 mg/L, 72h (Desmodesmus subspicatus) EC50: = 4.4 mg/L, 96h (Pseudokirchneriella subcapitata)	LC50: = 9.6 mg/L, 96h static (Oryzias latipes) LC50: = 4.5 mg/L, 96h (Oryzias latipes) LC50: = 8.18 mg/L, 96h (Pimephales promelas) LC50: 1.0 - 10.0 mg/L, 96h static (Pimephales promelas) LC50: 7.66 - 8.74 mg/L, 96h flow-through (Pimephales promelas) LC50: = 13 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 4.2 mg/L, 96h static (Oncorhynchus mykiss)	EC50: 1.58 - 8.43 mg/L, 48h Static (Daphnia magna)

12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Tributyl phosphate

IMDG

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Tributyl phosphate

IATA

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Tributyl phosphate

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed/applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed/applicable.

SARA 304 Emergency release notification

Not listed/applicable.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed/applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed/applicable.

SARA 311/312 Hazardous

Acute Health Hazard: Yes.

Chronic Health Hazard: Yes.

SARA 313 (TRI reporting)

Not listed/applicable.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not listed/applicable.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not listed/applicable.

Safe Drinking Water Act

Not listed/applicable.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed/applicable.

US state regulations

US. Massachusetts RTK - Substance List

Tributyl phosphate: Listed.

US. New Jersey Worker and Community Right-to-Know Act

Tributyl phosphate: Listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Tributyl phosphate: Listed.

California Proposition 65

Not listed.

SECTION 16: Other information

Date of Issue: 6/24/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

